

SUMMARY OF THE CLAIMS

1.-31. (Cancelled).

32. (Previously presented) An article comprising a water-absorbent sheet material comprising a lightly cross-linked unneutralized acidic water-absorbent resin and a lightly crosslinked unneutralized basic water-absorbent resin, said absorbent sheet material manufactured by a process comprising:

depositing particles of the acidic and the basic water-absorbent resins onto a support surface to form a continuous layer of water-absorbent resin particles; and

compressing the layer of resin particles to form the water-absorbent sheet material in a pre-determined thickness.

33. (Original) The article of claim 32 wherein the article is a diaper or a catamenial device.

34. (Original) A process of absorbing an aqueous medium comprising contacting the medium with the article of claim 32.

35. (Original) The process of claim 34 wherein the aqueous medium contains electrolytes.

36. (Original) The process of claim 35 wherein the electrolyte-containing aqueous medium is selected from the group consisting of urine, saline, menses, and blood.

37. (Withdrawn) A diaper having a core, said core cut from a roll of sheet material, said sheet material comprising at least 15% by weight of multi-component water-absorbent particles wherein each multi-component particle comprises at least one microdomain of a water-absorbing acidic resin in contact with or in close proximity to at least one microdomain of a water-absorbing basic resin.

38. (Withdrawn) A diaper having a core, said core comprising at least 15% by weight of multi-component water-absorbent particles wherein each multi-component water-absorbent particle comprises at least one microdomain of a water-absorbing acidic resin in contact with or in close proximity to at least one microdomain of a water-absorbing basic resin, said multicomponent water-absorbent particles held together by contacting a layer of said particles with a bonding expedient selected from the group consisting of water, propylene glycol, glycerin, a C1-C3 alcohol, dimethyl formamide, dimethyl sulfoxide, heat, and a combination thereof.

39. (Withdrawn) The diaper of claim 38 wherein the core has an acquisition rate for 100 milliliters of 0.9% saline under a load of 0.7 psi greater than two milliliters/second.

40. (Withdrawn) The diaper of claim 39 wherein the core has an acquisition rate for a subsequent 50 milliliters of 0.9% saline of greater than two milliliters/second.

41. (Withdrawn) The diaper of claim 40 wherein the core has an acquisition rate for a second subsequent 50 milliliters of 0.9% saline of greater than two milliliters/second.

42. (Withdrawn) The diaper of claim 38 wherein the core comprises at least 50% by weight multicomponent superabsorbent particles.

43. (Withdrawn) The diaper of claim 42 wherein the core has a shakeout of less than 10%, by weight, of the multicomponent superabsorbent particles.

44. (Withdrawn) The diaper of claim 38 wherein the core comprises at least 75% by weight multicomponent superabsorbent particles.

45. (Withdrawn) The diaper of claim 38 wherein the core comprises 100% by weight multicomponent superabsorbent particles or their component acidic and basic resins.

46. (Withdrawn) The diaper of claim 38 further comprising a topsheet in contact with a first surface of the core, and a backsheet in contact with a second surface of the core, said second core surface opposite from said first core surface.

47. (Withdrawn) The diaper of claim 46 further comprising an acquisition layer disposed between the topsheet and the core.

48. (Withdrawn) The diaper of claim 46 wherein the diaper is free of an acquisition layer.

49. (Withdrawn) A diaper having a core, said core comprising at least 15% by weight of a superabsorbent material selected from the group consisting of (a) a blend of acidic water-absorbent resin particles neutralized 0% to 25%, and basic water-absorbent resin particles; (b) multicomponent water-absorbent resin particles comprising the acidic and basic resins of (a) disposed in the same particle but in different microdomains, and (c) mixtures thereof.

50. (Withdrawn) The diaper of claim 49 wherein the core has an acquisition rate for 100 milliliters of 0.9% saline under a load of 0.7 psi of greater than two milliliters/second, and has an acquisition for a first, second, and third subsequent 50 milliliters of 0.9% saline under a load of 0.7 psi of greater than two milliliters/second.

51. (Withdrawn) The diaper of claim 49 wherein the core comprises at least 50% by weight of one or more superabsorbent materials selected from (a), (b) and (c).

52. (Withdrawn) The diaper of claim 49 wherein the core has a shakeout of less than 10%, by weight, of the multicomponent superabsorbent particles.

53. (Withdrawn) The diaper of claim 49 wherein the core comprises at least 75% by weight of the superabsorbent material selected from (a), (b) and (c).

54. (Withdrawn) The diaper of claim 49 wherein the core comprises 100% by weight of the superabsorbent material selected from (a), (b) and (c).

55. (Withdrawn) The diaper of claim 49 further comprising a topsheet in contact with a first surface of the core, and a backsheet in contact with a second surface of the core, said second core surface opposite from said first core surface.

56. (Withdrawn) The diaper of claim 55 further comprising an acquisition layer disposed between the topsheet and the core.

57. (Withdrawn) The diaper of claim 55 wherein the diaper is free of an acquisition layer.

58.-76. (Cancelled).

77. (Withdrawn) A diaper having a core cut from a roll of sheet material, said sheet material comprising at least 15% by weight of multicomponent water-absorbent particles wherein each multicomponent particle comprises at least one microdomain of a water-absorbing acidic resin in contact with or in close proximity to at least one microdomain of a water-absorbing basic resin, wherein said core has an improved integrity compared to a core containing a conventional superabsorbent polymer of 0.2 to 3.5 times in the cross direction and 0.2 to 3 times in the machine direction.

78. (Withdrawn) A diaper having a core cut from a roll of sheet material, said core comprising at least 15% by weight of a superabsorbent material selected from the group consisting of (a) a blend of acidic water-absorbent resin particles neutralized 0% to 25%, and basic water-absorbent resin particles; (b) multicomponent water-absorbent resin particles comprising the acidic and basic resins of (a) disposed in the same particle but in different microdomains, and (c) mixtures thereof, wherein said core has an improved integrity compared to a core containing a conventional superabsorbent polymer of 0.2 to 3.5 times in the cross direction and 0.2 to 3 times in the machine direction.

79. (Previously presented) The article of claim 32 wherein the process for manufacturing the absorbent sheet material further comprises a step of contacting the resin particles with a bonding expedient selected from the group consisting of water, propylene glycol, glycerin, a C1-C3 alcohol, dimethyl formamide, dimethyl sulfoxide, heat, and a combination thereof, prior to or simultaneously with compressing the resin particles, to bond adjacent water-absorbent resin particles.

80. (Previously presented) The article of claim 32 wherein the basic water-absorbing resin is neutralized 0% to 25% and the acidic water-absorbing resin is neutralized 0% to 25%.

81. (Previously presented) The article of claim 80 further including depositing a second acidic water-absorbing resin neutralized 25% to 100%.